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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,103	08/31/2000	Sunay Tripathi	SUN1P707	5614

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EXAMINER

GOLD, AVI M

ART UNIT PAPER NUMBER

2157

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/654,103	Applicant(s) TRIPATHI ET AL.	
	Examiner Avi Gold	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5,6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed August 31, 2000. Claims 1-27 are pending. Claims 1-27 represent methods and apparatus for providing an in-kernel interface to a web server.

Drawings

2. New corrected drawings are required in this application because figures 1, 2, 3, and 8 are hand drawn and illegible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "111" and "116" have both been used to designate "Network Interface Card". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: status of related applications needs to be updated. Appropriate correction is required.

Claim Objections

5. Claim 7 objected to because of the following informalities: There is a period between "the" and "reading" in the middle of a sentence on line 16. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning of a "permanent listening stream" is not clear and should be defined in the specification or claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-13, 15, and 18-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta et al., U.S. Patent No. 6,374,305.

Gupta teaches the invention as claimed including a mobile-based client-server system (see abstract).

Regarding claim 1, Gupta discloses a method of sending a HTTP request to a web server, comprising:

- receiving a HTTP request including HTTP request data;
- associating a connection identifier with the HTTP request;
- repeating the receiving and associating steps for one or more HTTP requests;
- and

sending the connection identifier and the associated HTTP request data for the one or more HTTP requests in a single stream (col. 2, lines 39-49, Gupta discloses a web agent that transmits and receives packed HTTP messages).

Regarding claim 2, Gupta discloses creating a permanent listening stream; wherein sending the connection identifier and the associated HTTP request data for the one or more HTTP requests comprises sending the connection identifier and the associated HTTP request data for the one or more HTTP requests in the permanent listening stream (col. 2, lines 39-49; col. 4, lines 32-35, Gupta discloses a server message handler transmitting packed HTTP messages downstream; col 5. lines 4-5, Gupta discloses packed messages transmitted upstream to the server).

Regarding claim 3, Gupta discloses the permanent listening stream connecting a network cache accelerator to a file system to enable the one, or more HTTP requests to be received from the network cache accelerator, stored with associated connection identifiers, and accessed by the file system, the network cache accelerator being adapted for communicating with one or more clients corresponding to the one or more HTTP requests, the file system being adapted for sending the HTTP requests to the web server and receiving HTTP responses from the web server (col. 2, lines 59-62, Gupta discloses proxy and web agent layers that have memory caches).

Regarding claim 4, Gupta discloses creating a stream; obtaining HTTP response data associated with one of the HTTP requests; and sending the HTTP response data and the connection identifier in the stream (col. 2, lines 39-49).

Regarding claim 5, Gupta discloses the stream connecting a network cache accelerator to a file system, obtaining the HTTP response data is performed by the file

system and sending the HTTP response data and the connection identifier in the stream comprises sending the HTTP response data and the connection identifier in the stream from the file system to the network cache accelerator (col. 2, lines 59-62).

Regarding claim 6, Gupta discloses that creating the stream is performed in parallel with reading of an HTTP request and preparation of a corresponding HTTP response by the web server (col. 2, lines 39-58, Gupta discloses a web agent that transmits and receives packed HTTP messages and how the respective client station proxy layer and server web agent exchange HTTP messages between the web browser and web server).

Regarding claim 7, Gupta discloses that creating the stream is further performed asynchronously with the reading of the HTTP request and the preparation of the corresponding HTTP response by the web server (col. 2, lines 39-58, Gupta discloses).

Regarding claim 8, Gupta discloses that sending the connection identifier and the associated HTTP request data for the one or more HTTP requests comprises sending the connection identifier and the associated HTTP request data for the one or more HTTP requests to a HTTP process (col. 2, lines 39-49).

Regarding claim 9, Gupta discloses that the HTTP process is a HTTP daemon (col. 2, lines 39-49).

Regarding claim 10, Gupta discloses instantiating an object;
providing the connection identifier and the associated HTTP request data for the one or more HTTP requests in the object; and

wherein sending the connection identifier and the associated HTTP request data for the one or more HTTP requests comprises sending the object to a HTTP process (col. 2, lines 39-49).

Regarding claim 11, Gupta discloses storing the connection identifier and the associated HTTP request data for each of the one or more HTTP requests (col. 2, lines 39-49).

Regarding claim 12, Gupta discloses sending the connection identifier and the associated HTTP request data for the one or more HTTP requests in a single stream comprises:

sending the connection identifier and the associated HTTP request data to a cache manager capable of storing the connection identifier and the associated HTTP request data and retrieving the HTTP request data when the connection identifier is received (col. 3, lines 10-14, Gupta discloses how information is transmitted to the client station and stored in the memory cache until a full request is made).

Regarding claim 13, Gupta discloses receiving a read request from the web server;

sending HTTP request data to the web server in response to the read request (col. 2, lines 39-49).

Regarding claim 15, Gupta discloses receiving HTTP response data associated with the HTTP request data from the web server (col. 2, lines 39-49).

Regarding claim 18, Gupta discloses storing the HTTP response data such that the HTTP response data is associated with one of the HTTP requests and the associated connection identifier (col. 2, lines 65-67, Gupta discloses that information from the server can be duplicated for storage in the cache).

Regarding claim 19, Gupta discloses sending a write command including the connection identifier and the HTTP response data to a data transport module capable of transmitting the HTTP response data to a client (col. 2, lines 39-58).

Regarding claim 20, Gupta discloses creating a stream; and
sending the HTTP response data and the connection identifier in the stream (col. 2, lines 39-49).

Regarding claim 21, Gupta discloses instantiating an object;
providing the HTTP response data and the connection identifier in the object; and
wherein sending the HTTP response data and the connection identifier comprises sending the object to a data transport module for transmission to a client (col. 2, lines 39-49).

Regarding claim 22, Gupta discloses a method of processing a HTTP response including HTTP response data received from a web server, comprising:

receiving HTTP response data from a HTTP process;
obtaining a connection identifier associated with the HTTP response data;

creating a stream; and
sending the HTTP response data and the obtained associated connection identifier in the stream to a module for transmission to a client (col. 2, lines 39-58).

Regarding claim 23, Gupta discloses a method of processing a HTTP request including HTTP request data, comprising:

receiving HTTP request data and an associated connection identifier;
obtaining HTTP response data associated with the HTTP request data; and
sending the HTTP response data and the connection identifier to a module for transmission to a client (col. 2, lines 39-58).

Regarding claim 24, Gupta discloses creating a data stream; and
sending the HTTP response data and the connection identifier in the data stream (col. 4, lines 32-35; col. 5, lines 4-5).

Regarding claim 25, Gupta discloses receiving the HTTP response data from a HTTP process;

wherein creating a data stream and sending the HTTP response data and the connection identifier in the data stream are performed by a file server for transmission to a data transport module (col. 4, lines 32-35; col. 5, lines 4-5).

Regarding claim 26, Gupta discloses instantiating an object;
providing the HTTP response data and the connection identifier in the object; and
wherein sending the HTTP response data and the connection identifier comprises sending the object to a data transport module for transmission to a client (col. 2, lines 39-49).

Regarding claim 27, Gupta discloses a computer-readable medium storing thereon computer readable instructions for sending a HTTP request to a web server, comprising:

instructions for receiving a HTTP request including HTTP request data;
instructions for associating a connection identifier with the HTTP request;
instructions for repeating the receiving and associating steps for one or more HTTP requests; and

instructions for sending the connection identifier and the associated HTTP request data for the one or more HTTP requests in a single stream (col. 2, lines 39-58, lines 65-67; col. 3, lines 1-8, Gupta discloses a proxy that determines if information is already in the cache and if it is the responsive information can be received from the cache without requiring transmission to the server).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta in view of Kawabe et al., U.S. Patent No. 5,968,127.

Gupta teaches the invention as claimed including a mobile-based client-server system (see abstract).

As to claim 14, 16, and 17, Gupta teaches the method of claim 1, 13, and 15.

Gupta fails to teach the limitation further including the use of a file descriptor and a private attachment.

However, Kawabe teaches an information processing apparatus (see abstract). Kawabe teaches the use of a file descriptor as a handle for accessing the, private attachment, resource corresponding to a name (col. 1, lines 23-27).

It would be obvious to one of ordinary skill in the art, at the time the invention to modify Gupta in view of Kawabe to use a file descriptor with a private attachment when

sending and receiving HTTP data. One would be motivated to do so because it would result in an efficient method to send and receive data.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,138,162 to Pistriotto et al.

U.S. Pat. No. 6,389,462 to Cohen et al.

U.S. Pat. No. 5,951,694 to Choquier et al.

U.S. Pat. No. 6,418,544 to Nesbitt et al.

U.S. Pat. No. 6,131,122 to Sampson

U.S. Pat. No. 6,334,142 to Newton et al.

U.S. Pat. No. 6,377,984 to Najork et al.

U.S. Pat. No. 6,611,873 to Kanehara

U.S. Pat. No. 6,321,181 to Havens

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 703-305-8762.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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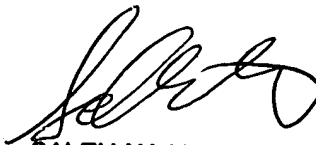
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Avi Gold

Patent Examiner

Art Unit 2157

AMG



SALEH NAJJAR
PRIMARY EXAMINER